## ABSTRACT OF THE DISCLOSURE

An automatic gain control apparatus for a video signal and adjusting method thereof. An RF(Radio Frequency) automatic gain control apparatus receives a reproduced video signal from a demodulator, controlling a gain of an RF amplifier according to the reproduced video signal. An IF(Intermediate Frequency) automatic gain control apparatus receives a reproduced video signal from a demodulator, controlling a gain of an IF amplifier according to the reproduced video signal. In the meantime, a RF automatic gain control compensating unit detects an input signal provided to the IF amplifier, checking whether the detected IF input signal meets a reference level, controlling for raising a voltage of the RF automatic gain control apparatus if the detected IF input signal is lower than the reference level, controlling for lowering a voltage of the RF automatic gain control apparatus if the detected IF input signal is higher than the reference level.